

CLAIMS

1. A system for remotely controlling one or more devices over a communications network, wherein the network includes first and second network
5 sides and means for controlling access between the first and second sides, the system comprising:
 - a first controller connected to the network on the first network side for receiving device control messages from a control station; and
 - a second controller connected to the network on the second network side,
10 for receiving the device control messages from the first controller and controlling the one or more devices in response thereto;
 - wherein the first controller is configured to send the device control messages to the second controller after initiation of a connection to the first controller by the second controller.
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2. A system according to claim 1, wherein the second controller initiates the connection by sending a connection request to the first controller.
3. A system according to claim 1 or 2, wherein the access control means is
20 configured to prevent connection requests from the first controller from reaching the second controller.
4. A system according to claim 1, 2 or 3, wherein the system is configured to maintain a connection between the first and second controllers following receipt of
25 the connection request from the second controller at the first controller, to permit the first controller to send the device control messages to the second controller when said messages are received at the first controller.
5. A system according to claim 4, wherein the device control messages are
30 sent in an encrypted form.
6. A system according to any one of the preceding claims, wherein the first and second controllers are located at a site remote from the control station.

7. A system according to claim 6, wherein the communications path between the control station and the remote site comprises a wide area network.

5 8. A system according to claim 7, comprising further access control means between the wide area network and the first controller.

9. A system according to any one of the preceding claims, wherein the or each access control means comprise a firewall.

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10. A system according to claim 8, wherein the access control means and the further access control means comprise inner and outer firewalls and the first controller is connected in a demilitarised zone between the inner and outer firewalls.

15 11. A system according to any one of the preceding claims, wherein the first and second controllers communicate over ~~Transport~~ Control Protocol (TCP) port 1073.

12. A system according to any one of the preceding claims, wherein the control station is configured to receive information relating to an event occurring at the one
20 or more devices via the first and second controllers.

13. A system according to claim 12, wherein the control station generates a device control message in response to the received information.

25 14. A system according to claim 12 or 13, wherein the control station initiates a connection to the first controller to enable it to receive said information from the first controller.

15. A system according to claim 12 or 13, wherein the first controller initiates a
30 connection to the control station to enable the control station to receive said information from the first controller.

16. A system according to claim 15, wherein the first controller is triggered to initiate the connection to the control station after initiation of the connection to the first controller by the second controller.

5 17. A system according to any one of the preceding claims, wherein the second controller includes one or more device drivers for controlling said one or more devices.

18. A method of remotely controlling one or more devices over a
10 communications network, wherein the network includes first and second network sides and means for controlling access between the first and second sides, the method comprising:

initiating a connection to a first controller connected to the network on the first network side from a second controller connected to the network on the second
15 network side;

sending device control messages from a control station to the first controller and then from the first controller to the second controller.

19. A system for remotely monitoring one or more devices over a
20 communications network, wherein the network includes first and second network sides and means for controlling access between the first and second sides, the system comprising:

a monitor station connected to the network on the first network side for receiving information concerning said one or more devices;

25 a first controller connected to the network on the second network side for receiving said information and sending said information to the monitor station; and

a second controller for monitoring the one or more devices and sending said information to the first controller;

wherein the first controller is configured to send said information to the
30 monitor station after initiation of a connection to the first controller by the monitor station.

20. A system according to claim 19, wherein the system is configured to maintain a connection between the monitor station and the first controller following receipt of the connection request from the monitor station at the first controller, to permit the first controller to send information received at the first controller to the
5 monitor station without requesting a new connection to the monitor station.

21. A system according to claim 19 or 20, wherein the monitor station generates device control messages in response to the received information.

10 22. A system according to claim 21, wherein the device control messages are sent to the devices via the first and second controllers.

23. A system according to any one of claims 19 to 22, wherein the second controller is connected to the network on the second network side.

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24. A system according to any one of claims 19 to 23, wherein the first controller is located at a site local to the monitor station and the second controller is located at a site remote from the monitor station.

20 25. A system according to claim 24, wherein the communications path between the monitor station and the remote site comprises a wide area network.

26. A system according to claim 25, wherein the first controller is located in a demilitarised zone between a first firewall which separates the first controller from
25 the monitor station and a second firewall which separates the first controller from the wide area network.

27. A system according to claim 26, further comprising a third firewall separating the second controller from the wide area network.

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28. A system according to claim 27, wherein the third firewall is configured not to permit inbound connection requests to the second controller.

29. A system according to any one of claims 19 to 28, wherein the monitor station and the first controller communicate over Transport Control Protocol (TCP) port 1073.

5 30. A method of remotely monitoring one or more devices over a communications network, wherein the network includes first and second network sides and means for controlling access between the first and second sides, the method comprising:

10 initiating a connection to a first controller connected to the network on the second network side from a monitor station connected to the network on the first network side;

sending event information relating to the one or more devices from the second controller to the first controller and then from the first controller to the monitor station.

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31. A method according to claim 30, further comprising generating device control messages for controlling the devices in response to the received event information.